



## Hydration

Drinking fluids is an important part of participating in any sport or recreational activity. Staying well hydrated reduces your risk of sustaining a heat related injury and can increase physical performance levels.

Children at young ages are more susceptible to heat stress, parents must be diligent in maintaining and replacing fluids. Exercise increases the body's need for fluid. This can be further affected by environmental conditions, time and intensity of exercise, heat acclimatisation and personal sweat rates. During summer in Perth, and on days of high humidity, particular care should be taken to replace fluids. In the northern parts of Western Australia, such as the Kimberley and Pilbara, drinking fluid should be a priority all year round.



### Water is the best choice

Cool water is the best choice for children to stay hydrated during sport and physical activity.

For youth participating in prolonged high intensity activity, such as long distance running, there are benefits to using sports drinks containing carbohydrate and salt (electrolytes) replacements. High calorie sports drinks however, are generally unnecessary for most children participating in routine physical activity on the sports field or in the school yard. A high intake of sports drinks can result in an increased risk of weight gain, as well as tooth decay and erosion.

### Energy drinks

Energy drinks containing high amounts of caffeine should NOT be used by any young athlete, even those of elite levels. Caffeine is associated with a variety of negative health effects and should not be used to boost energy levels. Energy is best provided to the body through a balanced diet.

### Staying hydrated

- Drink plenty of fluids before, during and after physical activity
- Don't wait to feel thirsty to replace fluids
- Choose water for fluid replacement
- Sports drinks can be beneficial for extended periods of exercise, but the mouth should be rinsed out with water afterwards
- Children are at a greater risk of heat related injury
- Hot or humid weather conditions will increase your need for fluid replacement
- Cool fluids can be absorbed at a faster rate than warm fluids
- Fluid replacement is important for athletes, coaches, umpires and spectators
- Dehydration increases your risk of heat injury and can lead to poor performance
- Reduce intensity and duration of training and competition during periods of extreme temperatures
- If a child is feeling unwell due to the heat, do not allow them to continue participating





## Heat related injury

Long periods of high intensity exercise can put the body at risk of heat injury. The risk of heat injury is heightened by hot and humid weather. Endurance sports such as long distance running or those with prolonged exposure to the sun, such as cricket are most commonly associated with heat injury.

Signs and symptoms of heat injury can include:

- Fatigue
- Feeling hot
- Thirst
- Nausea
- Headache
- Dizziness/Light headedness
- Confusion
- Collapse
- Pale, clammy skin or dry skin
- Irritability

There are two main types of heat injury that occur during sport; heat exhaustion and heat stroke.

**Heat exhaustion** is often characterised by low blood pressure and faint-like collapse after exercise. A child suffering from heat exhaustion will usually recover quite quickly, however it can lead to heat stroke if not properly treated.

If a child is suffering from **heat stroke**, their body can no longer control its temperature. Heat stroke can cause severe injuries and can be fatal. As it is not always obvious whether an athlete is suffering heat exhaustion or heat stroke, it is best to treat both seriously.

Proudly supported by:



Government of **Western Australia**  
Department of **Health**

## Treating heat injury

If a child is suspected of heat injury, remove them from play and administer the following first aid:

1. Lie down in the shade and raise legs
2. Loosen tight clothing
3. Cool by fanning or sponging with water
4. Apply cool or ice packs to neck, groin and armpits
5. Give cool water to drink if fully conscious
6. If the person does not recover quickly seek medical assistance

## Beat the heat

To decrease the risk of heat injury the following precautions can be taken:

- Drink adequate amounts of fluid
- Slowly build up exercise intensity and distance
- Wear appropriate clothing for the weather conditions
- Modify training and competitions in extreme weather
- Refer to the heat policies of your sporting body
- When the UV index is 3 or above Slip on a shirt, Slop on some sunscreen, Slap on hat, Seek shade and Slide on some sunglasses to protect yourself from the sun [www.cancerwa.asn.au/prevention/sunsmart](http://www.cancerwa.asn.au/prevention/sunsmart)

### References:

- Committee on Nutrition and the Council on Sports Medicine and Fitness. (2011). Sports Drinks and Energy Drinks for Children and Adolescents: Are They Appropriate? *Pediatrics*, 127(6), 1182-1189.
- SmartPlay (n.d.). Drink Up. Retrieved May 2014 from SmartPlay Website: <http://national.smartplay.com.au/ImageLibraryAssets/resources/national/2011-drink-up-poster.pdf>
- Sports Medicine Australia (2008). Beat the Heat. Retrieved July 2014 from: <http://sma.org.au/wp-content/uploads/2011/03/beat-the-heat-2011.pdf>
- St John Ambulance (2012). Heat-Induced Conditions. Retrieved July 2014 from: [http://stjohn.org.au/assets/uploads/fact%20sheets/english/FS\\_heat.pdf](http://stjohn.org.au/assets/uploads/fact%20sheets/english/FS_heat.pdf)

### Kidsafe WA © 2015

Excerpts may be copied for educational purposes.  
Written permission is required to copy this fact sheet in its entirety.

For more information (08) 9340 8509  
Child Safety Information Line 1800 802 244  
Poisons Information Centre 13 11 26